

Crockett Vocational Technical Center in the Detroit Public Schools and an elementary teacher at Nsoroma Institute Public School Academy in Oak Park, Michigan.

The EarthWorks and Exchange City Instructional Coordinators work with students, teachers and parents under the day-to-day guidance of the EarthWorks and Exchange City Floor Directors and under the overall supervision and leadership of the Experiencia Site Director.

### **Professional Development and Technical Assistance**

All Experiencia staff receive ongoing professional development from outside consultants as well as trained Experiencia staff in content, instructional methodology, child development theory and management techniques pertinent to their specific roles. Mr. Michaelis leads weekly staff meetings in which EarthWorks and Exchange City staff come together to discuss a variety of issues including management and instructional processes that best support student learning, teacher training and parent involvement. In addition, on a monthly basis, the EarthWorks and Exchange City Floor Directors observe and coach their respective Instructional Coordinators and reflect with them on instructional strategies to enhance the simulation experience. Annually, Experiencia hosts a training conference for the programs' Floor Directors throughout the nation. Finally, outside consultants are scheduled to provide customized coaching and training in targeted areas of growth as needed. For example, in March, an outside instructional coach provided advanced training for selected Experiencia staff on how to use Bloom's Taxonomy to help students apply higher levels of thinking.

## **SECTION THREE: EVIDENCE OF PROGRAM EFFECTIVENESS**

Experiencia has tested the efficacy of its Immersive Learning model through a number of large-scale studies of Exchange City. These have been university-based assessments and their findings consistently report statistically significant gains by students regarding knowledge of economic and social studies concepts, skills and aptitudes. The first evaluation of Exchange City in the 1980's was conducted by the University of Kansas and the second major study was conducted by Indiana University in 1996. In addition, a number of school districts have conducted their own assessment strategies for Exchange City and EarthWorks and have reported that both of these programs are outstanding, effective and powerful learning curriculum and processes that improve student knowledge of important content as well as attitudes toward learning.

In the spring of 2002, Experiencia conducted a quasi-experimental assessment with a pilot group (N=102) of Exchange City 5<sup>th</sup> and 6<sup>th</sup> grade students from Kansas and Missouri. This pilot assessment, EXACTA, was an Internet-based, criterion-referenced test that measured the actual knowledge students gained between the pre-test (administered before the beginning of the Exchange City curriculum) and the post-test (administered within 2 weeks after the simulation experience). This prototype research was partially underwritten by the Honda Foundation and advised by Dr. Warren Wheelock, Professor of Education, University of Missouri-Kansas City. Dr. Wheelock is

the author of the widely used diagnostic assessment, the Classroom Reading Inventory (McGraw Hill), and a national forensic expert in assessment and diagnosis.

The outcomes of the prototype research testing were as follows:

1. **Positive and significant gains:** Every child gained from the pre- to post-test and average testing gains were highly significant.
2. **Students on and above grade level excelled:** 53 percent of the children tested as reading on or above grade level. These students scored on average at the 60<sup>th</sup> percentile on the pre-test and at the 81<sup>st</sup> percentile on the post-test. This is an average increase of 35 percent.
3. **Students below grade level made the greatest gains:** 47 percent of the children in this study tested as reading one or more levels below grade. These students scored on average at the 48.6<sup>th</sup> percentile on the pre-test and the 72.7<sup>th</sup> percentile on the post-test. This is an average increase of 49 percent.
4. **Further analysis of the lowest achieving students:** The scores of the lowest performing students, about half of the below-grade level students, were disaggregated further. This group, 22 percent of the test population, scored as reading 2 or more levels below grade (3<sup>rd</sup> grade or below);
  - 1.1. **Pre-test:** The lowest performing sub-group's pre-test scores average at the 41.7<sup>th</sup> percentile. This was 13 percentiles lower than students who scored 1 level below grade level and 18.3 percentiles lower than students on or above grade level.
  - 1.2. **Post-test:** These students in the lowest performing category scored on average on the post-test at the 71.6<sup>th</sup> percentile, demonstrating an average increase of 72 percent.

The EXACTA study, as well as the university studies and individual school district assessments, point to the impact of Experiencia's Immersive Learning model on learners of all capacities. Indications are that Experiencia's programming can be a great advantage not only for average and above students, but a break-through solution for poor performers. Experiencia is expanding this study to a large sample of Exchange City and EarthWorks students in Southeast Michigan. Experiencia's goal is to have a complete evaluation report by the end of the 2004-2005 school year.

Over the past 20 years of EarthWorks and Exchange City implementation, qualitative data collected annually from educators and parents consistently indicate that these groups identify EarthWorks and Exchange City as exciting and innovative programs that help educators teach important content, get students excited about learning and create an avenue for meaningful and positive parent involvement. Participating teachers and parents view EarthWorks and Exchange City as a fundamental enhancement to standard curriculum and instruction. Annually, 90% of the schools, districts, parents and

community organizations that participate in EarthWorks and Exchange City choose to re-enroll. During the 2003-2004 school year, over 160,000 students throughout the nation are participating in these programs.

## **Evaluation, Monitoring for Effectiveness and Communication**

### **Overall Evaluation and Monitoring**

Experiencia requests that all teachers participating in EarthWorks and Exchange City fill out questionnaires assessing how well the programs are aligned with State and district accountabilities. The questionnaires also ask teachers to identify areas in which the programming could be improved. Other questions assess teachers' perspective on the impact of the programming on student learning, the quality of the teacher training and the expertise of the Experiencia staff. This ongoing data collection assists Experiencia in continuously addressing content and student achievement and priorities for participating districts and schools. This information also provides guidance to Experiencia on professional development priorities for their own staff.

All parent volunteers are also given questionnaires assessing EarthWorks and Exchange City. Parents are asked to identify the impact of the programming on their child's learning, the quality of the simulation experience and the helpfulness and professionalism of the Experiencia staff. Parents are also asked if they would choose to participate again and if they would recommend these programs to other parents. Parents are also asked to identify areas in which they think EarthWorks and Exchange City could be improved.

The EXACTA study, as well as the university studies and individual school district assessments, point to the impact of the Experiencia's Immersive Learning model on learners of all capacities. Indications are that Experiencia's programming can be a great advantage not only for average and above students, but a break-through solution for poor performers. Experiencia is expanding this study to a large sample of both Exchange City and EarthWorks students in Southeast Michigan. Experiencia has contracted for this new evaluation to be conducted by the Washington-based research firm Tabori Whitehead, Inc. Experiencia's goal is to have a complete evaluation report by the end of the 2004-2005 school year.

### **Monitoring Student Progress**

During the EarthWorks and Exchange City simulation experiences, teachers and facilitators are given a rubric which guides them in observing their students' application of content and skills. This opportunity for teachers and facilitators to engage in authentic assessment of student learning allows them to monitor student progress and provide targeted instructional interventions.

Furthermore, the evaluation study that will be conducted by Tabori Whitehead, Inc. during the 2004-2005 school year will collect pre- and post-test data with a large sample of students participating in EarthWorks and Exchange City in Southeast Michigan. Pre-